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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,806	05/02/2001	Ferdinand Kristen	DT-3897	4906

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EXAMINER

LOPEZ, MICHELLE

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/847,806	Applicant(s) KRISTEN ET AL.	
	Examiner Michelle Lopez	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 3-5 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on January 06, 2005.
2. Claim 2 has been canceled.

Claim Objections

3. Claim 3 is objected to because of the following informalities: Claim 3 is labeled as "currently amended" but no visible amendment has been made by the Applicant.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guzzella (5,584,619) in view of Steffen (6,123,158) in further view of Moolenaar et al. (5,385,512).

Guzzella discloses the invention substantially as claimed including an electric hand tool apparatus M for driving a drilling tool effecting at least partially a rotational movement and comprising a housing, an electric motor 7 within said housing, motor control electronics including a microcontroller 3 within said housing in operational engagement with said electric motor 7 and arranged to control the rpm of said electric motor, a force transfer path, seen in Figure 2, from said motor to a transmission and rpm-dependent clutch 5 in the force transfer path for transmitting torque from said electric motor to said transmission and a sensor 1 connected

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with and to said housing for determining a future excessively high twisting of said housing for actively braking said motor.

With respect to claims 1 and 3, Guzzella teaches the use of a mechanical clutch, as a claw coupling, a quick action brake, etc., as described in col. 2; 43-61 for the purpose of reducing the weight of small machines tools.

With respect to claims 1 and 3, Guzzella does not show a specific magnetic reluctance motor free of a collector and slip ring for producing a torque and rapidly braking.

However, Steffen teaches the use of a magnetic reluctance motor and a motor free of a collector and slip ring for producing torque. Moreover, Steffen specifically states that these types of motors are well known in the art for their low wear characteristics as described in column 1, lines 20-30.

Therefore, it would have been obvious to one having ordinary skill in the art to modify Guzzella with a specific type of motor taught in Steffen, and well known in the art, in order to decrease wear.

Moreover, Moolenaar et al. teaches the well known concept of rapid braking a motor for the purpose of further reducing the speed of the motor quickly as in column 1, lines 58-60 and column 5, lines 20-30.

Therefore, it would have been obvious to one having ordinary skill in the art to provide Guzzella with a rapid braking option in order to more effectively reduce the motor speed.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guzzella (5,584,619) in view of Steffen (6,123,158) in further view of Moolenaar et al. (5,385,512).

Guzzella discloses the invention substantially as claimed including a method of operating an electric hand tool for limiting an excessively high twisting of a housing of the electric and tool in the event of an obstruction during operation, the electric hand tool M comprising a housing, an electric motor 7 for producing a torque, motor control electronics 3 within the housing in operational engagement with the electric motor for controlling rpm of the torque thereof, a transmission, seen in Figure 2, within the housing for transmitting rotational movement along a force transfer path from the motor to the transmission, and a rpm-dependent clutch 5 in the force transfer path from transmitting torque from the electric motor to the transmission, a sensor 1 connected with the housing for detecting future excessively high twisting of the housing, comprising the steps of triggering a safety signal when an excessively high twisting of the housing is recorded by the sensor, actively reducing the rpm of the electric motor via the motor control electronics (which occurs inherently as in column 4, lines 50-66), and with the reduction, of the rpm interrupting the transfer torque over the force transfer path (as in claim 4), the steps of polling and evaluating the safety signal before accelerating the electric motor via the electronic control electronics described in column 6, lines 15-45 (as in claim 5), but does not explicitly show an electric motor for producing a torque and being free of a collector and slip ring and rapid braking.

However, Steffen teaches the use of reducing the rpm of the electric motor via the motor control electronics and a motor free of a collector and slip ring for producing torque.

Moreover, Steffen specifically states that these types of motors are well known in the art for their low wear characteristics as described in column 1, lines 20-30.

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Therefore, it would have been obvious to one having ordinary skill in the art to modify Guzzella with a specific type of motor taught in Steffen, and well known in the art, in order to decrease wear.

Moreover, Moolenaar et al. teaches the well known concept of rapid braking a motor for the purpose of further reducing the speed of the motor quickly as in column 1, lines 58-60 and column 5, lines 20-30.

Therefore, it would have been obvious to one having ordinary skill in the art to provide Guzzella with a rapid braking option in order to more effectively reduce the motor speed.

With respect to claims 4 and 5, Guzzella teaches the use of a mechanical clutch, as a claw coupling, a quick action brake, etc., as described in col. 2; 43-61 for the purpose of reducing the weight of small machines tools.

Conclusion

6. Applicant's arguments have been fully considered but they are not persuasive.

Applicant contends that Guzzella does not disclose a strictly mechanical rpm-dependent clutch. However, Examiner contends that Guzzella states such a mechanical clutch are well known in the art as described in column 2, lines 43-61.

Also, as stated in the Office Action filed on November 03, 2003, Examiner contends that Guzzella does inherently show measuring rpm as in column 3, lines 52-60 where it is stated, "one sensor, such as an angular acceleration sensor, which can be formed by an accelerator meter, angular speed sensor, a path meter, etc., or a torque sensor".

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Moreover, it is well known in the art that if acceleration is discovered, simple integration will result in the velocity or speed component. Therefore, it is deemed that Guzella inherently teach such an rpm-dependent clutch.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Lopez whose telephone number is 571-272-4464. The examiner can normally be reached on Monday - Thursday: 8:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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9. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

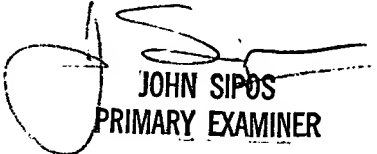
may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML


JOHN SIPOS
PRIMARY EXAMINER